To: ULWQS Steering Committee Members From: Facilitation Team and UDWQ Staff Re: Science Panel Nominations Process

Date: Friday, February 2, 2018

As you know, the Utah Lake Science Panel, under the direction of the Steering Committee, is charged with developing a scientifically defensible approach for developing nitrogen and phosphorus nutrient criteria on Utah Lake, overseeing targeted scientific study to support that approach, and forwarding recommendations for nutrient criteria for consideration by the Committee. The nomination process (see link at the bottom of the memo) and selection criteria presented below identify the scientific expertise needed, objectives, and duties of the prospective members, the level of effort expected of each panelist, and the criteria by which they are qualified to serve on the Science Panel.

If you are considering nominating an individual(s) for the Utah Lake Science Panel, please send them a copy of the Charter document [https://documents.deq.utah.gov/water-quality/watershed-protection/utah-lake/DWQ-2017-004494.pdf] and refer specifically to pages 8-10 which provide a description of the purpose, objectives, duties, and overall ideas on the Science Panel process at this point in time. Reviewing the entire document will also assist them in understanding the broader Steering Committee process and goals. Please plan on submitting nominations by Close of Business, Tuesday, February 20.

As referenced in that document, "the purpose of the Utah Lake Science Panel (Science Panel) is to guide water quality criteria development on Utah Lake by overseeing targeted scientific studies." Here are some highlights for your and their consideration:

Process/Level of Effort

- 1. Candidates may be from the public or private sector, however they may not be Steering Committee members (primary or alternate)
- 2. Expected to attend and participate in all meetings
 - The Charter references 4 meetings a year in general however initial Steering Committee conversations would indicate this could range from 3 to 6 meetings a year and the length of the meetings is at present uncertain, possibly ranging from 0.5 days to 2 days. Final determination of what is needed and possible will need to be discussed once the Science Panel is seated and in consultation with the Steering Committee.
 - In-person participation is preferred in most cases, however provisions can be made for remote participation in special circumstances.
- 3. Reimbursement will be provided for out-of-state travel

Objectives/Duties

- 1. Identify gaps in scientific understanding of the Utah Lake ecosystem related to nutrient cycling to be addressed for water quality criteria development.
- 2. Recommend scientific study objectives to the Steering Committee based on broad objectives and scope outlined by the Steering Committee.
- 3. Recommend and prioritize studies to the Steering Committee.
- 4. Review and approve detailed work plans for scientific studies that follow EPA's Guidance on Systematic Planning using the Data Quality Objectives Process (EPA QA/G-4).
- 5. Develop and execute a process for independent peer review of scientific studies.

- 6. Develop a process to characterize scientific uncertainty including confidence of scientific findings and quantified measures of uncertainty.
- 7. Guide scientific research activities by defining study objectives, developing study methods, directing study contractors, and interpreting and reporting results.
- 8. Science Panel members will nominate and select a chair person.
- 9. Science Panel members will agree on a set of operating principles once they are seated.

The criteria by which the Steering Committee, per their January 23 meeting, will be making recommendations on Science Panel membership are as follows. Nominees should:

- 1. Be considered an expert in at least one of the following scientific disciplines:
 - Aquatic ecology
 - Biogeochemistry
 - Fisheries management
 - Hydrodynamic modeling/hydrology
 - Limnology
 - Nutrient cycling
 - Phycology
 - Toxicology
 - Water quality criteria development
 - Water quality modeling
 - Wetland science
 - Other relevant expertise
- 2. Show demonstrated expertise in their respective field through:
 - Recent (within the last 5 years) peer reviewed publications
 - Demonstrated application of science to manage lake resources
- 3. Be currently active in their respective field
- 4. Be objective in their approach to the types of tasks the Science Panel will undertake
 - Science Panel members are expected to provide independent analysis and interpretation of scientific information and remain objective with regard to the water quality study's goals and approach
 - Individuals do not come with pre-determined outcomes
 - Individuals adhere to the scientific process and accepted protocols and procedures
- 5. Preferably, be independent (i.e., not financially associated with current Steering Committee members or their organizations)
 - While independence as defined above is not an absolute requirement, a preference for independence will be considered by the Steering Committee in making their recommendations.
 - All nominees shall be asked to disclose any potential conflicts of interest, any financial relationship or contracts with members of the Steering Committee, DWQ, or other special interests related to Utah Lake.

Finally, DWQ staff were asked to look into the question of whether allowing Science Panel members to compete for specific research projects being funded through the ULWQS effort is supported by State of Utah procurement laws. DWQ spoke with their financial analyst and found out the following: a Science Panel member may compete for research projects as long as they recuse themselves from the process of scope development and proposal selection. As such, if a Science Panel member believes they may be submitting a bid to conduct work they will need to recuse themselves from any related scoping efforts

and subsequent evaluation of, and recommendations related to, the submitted bids. Anyone involved in the scoping of a study will not be able to submit a bid for work. Please note ultimate decisions on who will conduct research work will be made by the DWQ, per procurement rules, through the open bidding process considering a recommendation from the Science Panel.

To nominate someone for the Science Panel please go to this link:

https://app.smartsheet.com/b/form/e397a0d1ebef4a7688f3f1f52f55bf3a

Again, the deadline for submitting nominations is **Close of Business, Tuesday, February 20**. Thank you in advance for your time and please reach out to any of us if you have questions.